

IN THE CLAIMS:

Claims 2-10 and 13-16 were previously canceled. Withdrawn claims 18 and 19 are to be canceled herein. Claims 12 and 17 have been amended herein. Claims 21 through 24 have been added herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of the Claims:

1. (Withdrawn) A method for distinguishing between subsets of red blood cells in a sample, said method comprising:

testing said sample with the reagent mixture of claim 17, and
determining the reactivity of said first and second antibodies.

2. through 10. (Canceled).

11. (Withdrawn) The method according to claim 1 further comprising determining the reactivity of said antibodies with said red blood cells by detecting fluorescence.

12. (Currently amended) A diagnostic kit for the discrimination of subsets of erythrocytes, said diagnostic kit comprising:

a first marker antibody reactive with hemoglobin F of a red blood cell, and
a second antibody reactive with carbonic anhydrase B of a red blood cell, and wherein said first and second antibodies each comprise a label for detecting reactivity of the first and second antibodies with cells by flow cytometry.

13. through 16. (Canceled).

17. (Currently amended) A reagent mixture for use in the discrimination of subsets of erythrocytes, said mixture comprising a first antibody reactive with hemoglobin F of a red blood cell and a second antibody reactive with carbonic anhydrase B of a red blood cell and wherein said first and second antibodies each comprise a label for detecting reactivity of the first and second antibodies with cells by flow cytometry.

18. (Canceled).

19. (Canceled).

20. (Withdrawn) A method for distinguishing between maternal and fetal red blood cells in a blood sample, said method comprising:

contacting the blood sample with the reagent mixture of claim 17, and
determining the interaction of said first and second antibodies by detecting said labels, thus distinguishing the first and second antibodies from one another in the blood sample.

21. (New) A diagnostic kit for the discrimination of subsets of erythrocytes, the diagnostic kit comprising:

a first antibody reactive with hemoglobin F of a red blood cell, and
a second antibody reactive with carbonic anhydrase A of a red blood cell, and wherein the first and second antibodies each comprise a label for detecting reactivity of the first and second antibodies with cells by flow cytometry.

22. (New) A reagent mixture for use in the discrimination of subsets of erythrocytes, said mixture comprising a first antibody reactive with hemoglobin F of a red blood cell and a second antibody reactive with carbonic anhydrase A of a red blood cell and wherein the first and second antibodies each comprise a label for detecting reactivity of the first and second antibodies with cells by flow cytometry.

23. (New) A diagnostic kit for the discrimination of subsets of erythrocytes, the diagnostic kit comprising:

an antibody reactive with hemoglobin F of a red blood cell, and

an inhibitor of carbonic anhydrase,

wherein the antibody and the inhibitor each comprise a label for detecting reactivity of the antibody and the inhibitor with cells by flow cytometry.

24. (New) A reagent mixture for use in the discrimination of subsets of erythrocytes, the mixture comprising:

an antibody reactive with hemoglobin F of a red blood cell, and

an oligodeoxynucleotide probe complementary to a stretch of carbonic anhydrase, the antibody and the oligodeoxynucleotide probe each comprising a label for detecting interaction of the antibody and the oligonucleotide probe with cells by flow cytometry.